

## ABSTRACT

The Multiple-Antenna Jamming System (MAJS) is useful for missile-borne jamming of active protection system radars that operate in close proximity to the frequency band of the missile's radio frequency seeker. The MAJS utilizes  
5 multiple receiving and transmitting antennas to reduce shadowing effects due to the transmissive radome. It also channelizes the jamming signals into in-seeker-band and out-of-seeker band signals to synchronize the transmission of jamming signals with the emit-listen pattern of the missile seeker and to eliminate the problem of de-sensitizing the RF seeker from the jammer energy. The in-seeker-  
10 band jamming signals are transmitted only concurrently with the missile seeker emissions and any signals emanating from an enemy radar are received only during the listen mode of the missile seeker.